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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,395	06/22/2001	Christophe Dauga	P 0281180 B00/1600US	4258
909	7590	11/14/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			SMITH, RUTH S	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	

3737

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/886,395	Applicant(s) DAUGA, CHRISTOPHE	
	Examiner Ruth S. Smith	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to because figure 2 includes boxes not properly labeled as to the elements that they represent. Reference numerals alone are insufficient. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because "reference Figure 2" should be deleted from the end of the abstract. The use of the term "the said" is improper. The use of legal phraseology such as the term "means" is improper. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 1-12,15-26 are objected to because of the following informalities: In claims 1,15,26, recitation of "wherein the apparatus does not contact the surface" appears to be directed to while the apparatus is being used. It is unclear as to what structure would prevent the apparatus from at any point in time contacting the surface. The preamble of claim 9 sets forth a non-contact examination, however, the body of the claim fails to provide for such a limitation. Claim 16 sets forth that the optical element

can be a polarizing splitter cube and further sets forth a camera. Applicant discloses that if the optical element includes a polarizer splitter cube then two cameras would be required. Therefore, any claim that sets forth a polarizer splitter cube should further set forth two cameras. Claim 17 depends from claim 15 or 16, however, claim 15 already sets forth a source of polarized light. In claims 19,20 "the source" lacks antecedent basis with respect to claim 16. In claim 21, "the analyzer lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12,15-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacques ('984) in view of Wang et al or Shiratori et al ('160). Regarding claims 1,15,16,26 Jacques teach an apparatus designed to examine a surface including a polarization analyzer element (38), means for taking digital images (50), and a processing unit (54) capable of calculating the brightness and intensity/color information of a plurality of points on the surface from pixels of at least two images (col. 5 line 50 - col. 6 line 7). Regarding claims 2 and 17, Jacques teach a source (2, 6) of polarized light. Regarding claims 3-5 and 18-20, Jacques teach a non-coherent white light source (col. 4 lines 48-49) wherein it is understood that white light is substantially similar to the solar spectrum (see the specification of the present invention p. 8 lines 5- 7). Regarding claims 6, 8 and 21 , Jacques teach a means (38) for alternatively transmitting cross polarization and parallel polarization using electronic switching (col. 5 lines 34-39). Regarding claims 9-12, Jacques teach a method for examination of a surface including: "analyzing" the polarization of a light beam reflected by the surface (38, col. 5 lines 28-39), taking digital images with camera (50) and performing image processing (54) of the different intensities of a plurality of points on the surface from pixels of at least two

images (col. 5 line 50 - col. 6 line 7). Jacques fails to specifically set forth a non-contact measurement. In column 2, lines 49-52, Jacques discloses that the invention “*may*” include an optical element in contact with the tissue surface. This clearly implies that the use of such is not necessary in order to carry disclosed measurements. One skilled in the art would clearly recognize that the use of such is not optically necessary to achieve the results provided in the embodiment of figure 1. Removal of the element would still result in the light 22 being reflected at an oblique angle in view of the incident light being provided at an oblique angle and light 28 would still be reflected from the superficial layer 26. It is well recognized in the art that such a coupling element is not necessary in order to obtain the desired optical measurements. Examples of non-contact surface analyzing devices that measure reflected light are seen in Shiratori et al and Wang et al. Therefore, it would have been obvious to one skilled in the art to have modified Jacques such that no contact element is used in view of the teachings of Jacques that such an element may not be required. It would have been obvious to one skilled in the art that the use of such is not optically necessary in the embodiment shown in figure 2 to achieve the desired results. Regarding claims 7, 22 and 23, Jacques differs from the claimed invention in that electronic switching means are used instead of a rotating analyzer. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use a rotating polarization analyzer instead of an electrically tunable liquid crystal analyzer because Applicant has not disclosed that a rotatable analyzer provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a rotating analyzer because it would be capable of alternately transmitting parallel- and perpendicular- polarization. With regard to claims 24,25, Jacques discloses the use of image processing software. It is a well known expedient in the art to use a computer to implement the software in order to process the image data acquired and therefore, the use of such would have been obvious to one skilled in the art.

Response to Arguments

Applicant's arguments with respect to claims 1-12,15-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

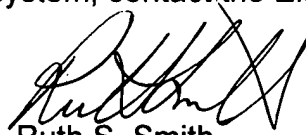
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ruth S. Smith
Primary Examiner
Art Unit 3737